



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JUL 20 2004

TECH CENTER 1600/2900

In re application of:

Joseph R. Byrum *et al.*

Art Unit: 1632

Appln. No.: 09/206,040

Examiner: Scott D. Priebe

Filed: December 4, 1998

Atty. Docket: 16517.137/  
38-21 (15446)B

For: Nucleic Acid Molecules and Other  
Molecules Associated with Plants

**Declaration under 37 C.F.R. § 1.132**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, **Thomas J. La Rosa**, make the following declaration related to matters that are within my personal knowledge:

1. I am a co-inventor of the above-captioned application.
2. On September 11, 2000, I provided a previous Declaration Under 37 C.F.R. § 1.132 in the above-captioned applications, which was filed with the United States Patent and Trademark Office on September 13, 2000. I add the following:
3. Serial No. 09/206,040 (hereinafter the “ ‘040 application”) discloses that the cDNA library is Monsanto’s LIBRARY 3049/soy55, and also designated throughout the specification as

LIB3049. *See*, for example, page 18, lines 14-18 and Examples 1 and 2 at page 67, line 10 through page 68, line 24.

4. I hereby certify that the library designated LIB3049 is the source of the soybean clone designated as LIB3049-003-Q1-E1-H7.

5. I further certify that the insert of clone LIB3049-003-Q1-E1-H7 contains a nucleic acid molecule comprising SEQ ID NO: 1, identified in the '040 application. As is described in the specification, a cDNA insert from LIB3049 is ligated and inserted into a pSPORT vector. *See* Example 1. Thus, the LIB3049-003-Q1-E1-H7 clone contains, in part, the nucleotide sequence of SEQ ID NO: 1.


6. I hereby certify that I have reviewed the Declaration of Roger C. Wiegand, Ph.D., Under 37 C.F.R. § 1.132, dated August 17, 2000.

7. I further hereby certify that, upon reviewing Dr. Wiegand's Declaration, the synthetic probe used in Dr. Wiegand's experiments and stated to be a "true enough copy" of SEQ ID NO: 1 included nucleotides that were a copy of SEQ ID NO: 1. Specifically, I have reviewed paragraph 16 and Exhibit A of Dr. Wiegand's Declaration. As is stated in paragraph 16 and shown in Exhibit A, five random polynucleotides of the population from which the synthetic probe was selected were sequenced to verify the accuracy of the probe sequence with respect to SEQ ID NO: 1. An analysis of these sequences showed that the synthesized polynucleotides had a consensus sequence identical to SEQ ID NO: 1. The sequencing results of the five random polynucleotides included a single nucleotide mutation of not more than one per molecule, and single nucleotide insertions ranging from 1 to 6 per molecule. The relationship of these sample sequences to SEQ ID NO: 1, as well as their consensus sequence with SEQ ID NO: 1, suggest

that the synthetic probe included nucleic acid molecules that were a copy of SEQ ID NO: 1. Furthermore, any possible deviation from the exact sequence of SEQ ID NO: 1 was accounted for by the experimental error allowed in the hybridization analysis performed by Dr. Wiegand. As such, the results reported by Dr. Wiegand are the results that would have been obtained using a nucleic acid molecule of SEQ ID NO: 1.

8. I also hereby certify that one skilled in the art of plant genomics and molecular biology using a nucleic acid probe containing the nucleotides of SEQ ID NO: 1 would be able to detect the presence or absence of polymorphisms within varieties of *Glycine max*, in addition to detecting polymorphisms between *Glycine max* and *Glycine soja*, using the Southern blot protocol described by Dr. Wiegand.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

  
Thomas J. La Rosa

Executed on May 20, 2004.